



Technical Service Bulletin

SUBJECT: POTENTIAL TRANSMISSION SHUDDER/SURGE WITH POSSIBLE DTC (CVT-8)			No: TSB-17-23-002
			DATE: April, 2017
			MODEL: See below
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

PURPOSE

Certain vehicles with F1CJC/W1CJC (CVT-8) transmissions may exhibit a shudder or surge condition possibly caused by poor reaction of the hydraulic pressure circuit. With continued driving under these conditions, the CVT belt may slip repeatedly, when accelerating, and abrasion powder may enter the hydraulic pressure circuit, causing a warning light to turn on with one of the following DTCs: P0776, P0730, P0741, P084A, P0969, P2719. The shudder/surge condition may also be described as engine flare, lack of acceleration, and/or car shake.

This TSB instructs dealers to diagnose and test drive vehicles exhibiting this condition. For all vehicles, verify that SR-16-006 has been completed (CVT ECU is updated to the software numbers listed in the "CVT ECU Reprogramming Chart" in this TSB, or higher). If any of the DTCs previously listed are present, dealers are required to submit data from MUTIII-SE, create a Techline case, and order a replacement transmission.

AFFECTED VEHICLES

The following vehicles equipped with F1CJC/W1CJC (CVT-8) transmissions ONLY:

- 2016 Lancer with 2.0L/2.4L engine
- 2016 Outlander with 2.4L engine
- 2015 Outlander Sport/RVR with 2.0L engine

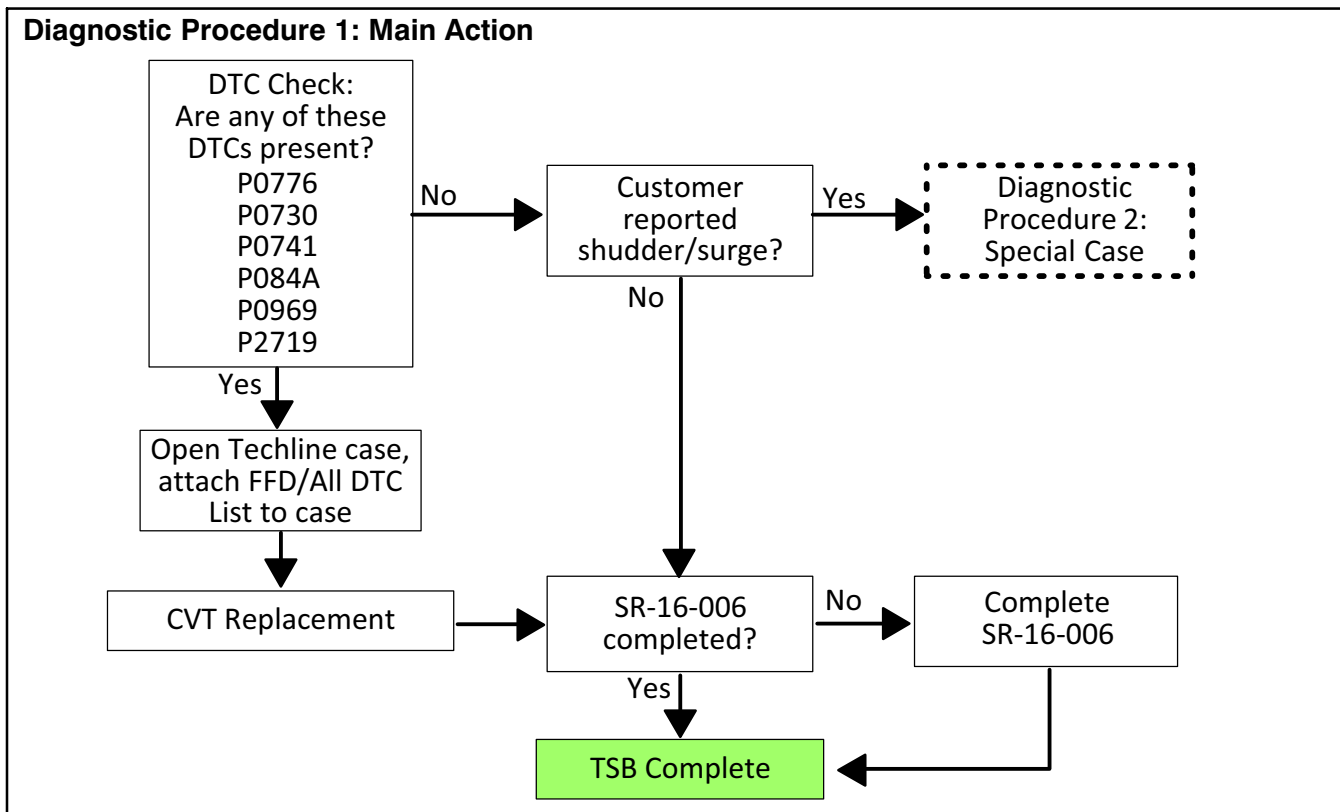
NOTE: This TSB should be performed on a customer complaint basis only.

CVT ECU REPROGRAMMING CHART

NOTE: If SR-16-006 shows as an open Recall in the Warranty Superscreen, then SR-16-006 must be completed. Once completed, the CVT ECU should then display the software numbers listed below.

Model	ECU Part Number	Data No.	Software Part Number	
			Previous	New
2016 Lancer (2.0L/4B11) (CY0A, CX0A; F1CJC, W1CJC)	8631B482	8631B802	8631B482 0A 8631B482 0B	8631B482 0C
2016 Lancer (2.4L/4B12) (CY0A, CX0A; F1CJC, W1CJC)	8631B483	8631B803	8631B483 0A 8631B483 0B	8631B483 0C
2016 Outlander (2.4L/4J12) (GF0W; F1CJC, W1CJC)	8631B371	8631B788	8631B371 0A 8631B371 0B 8631B371 0C	8631B371 0D
2015 Outlander Sport/RVR (2.0L/4B11) (GA0W; F1CJC, W1CJC)	8631B287	8631B780	8631B287 0A 8631B287 0B 8631B287 0C	8631B287 0D

REPAIR PROCEDURE



DIAGNOSTIC PROCEDURE 1: MAIN ACTION

1. Connect MUT-III to the vehicle and check for **any** of the following DTCs stored in the CVT ECU: P0776, P0730, P0741, P084A, P0969, P2719.

Are any of the DTCs listed above stored in the CVT ECU?

- **YES** – Go to step 3.
- **NO** – Go to step 2.

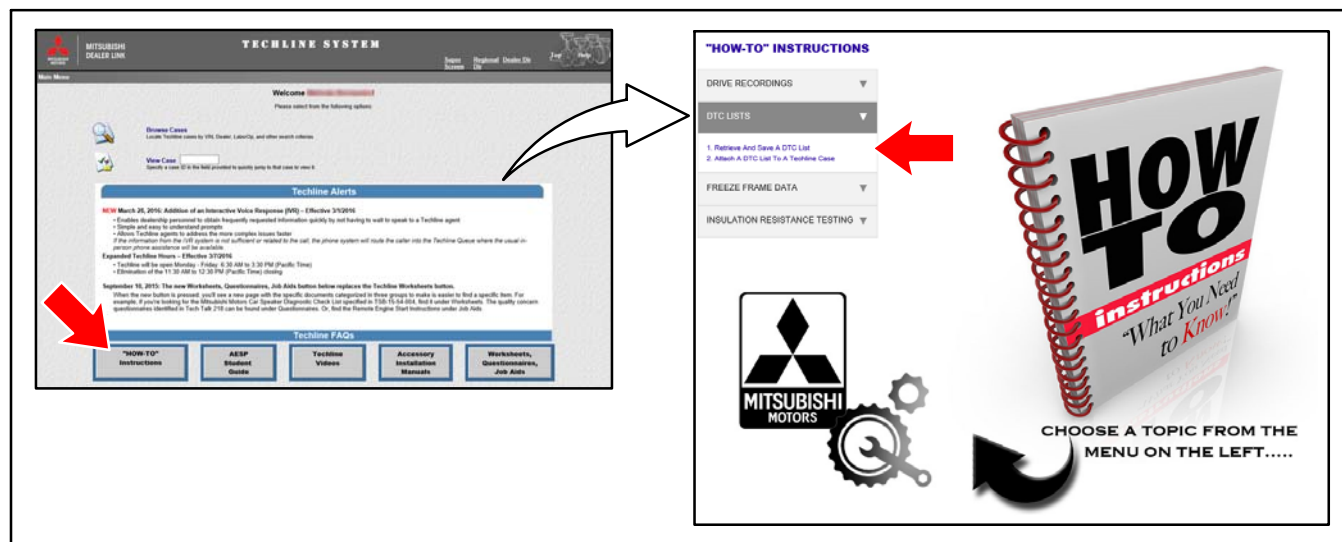
2. Did customer report that the vehicle exhibited (currently or previously) a shudder or surge condition? (This condition may also be described as engine flare, lack of acceleration, and/or car shake.)
 - **YES** – Go to “Diagnostic Procedure 2: Special Case” in this TSB.
 - **NO** – Go to step 4 to verify that SR-16-006 has been completed.

3. If any of the DTCs listed in step 1 are stored in the CVT ECU, perform the steps below.
 - a. Using MUT3—SE save an “ALL DTC” list or “Freeze Frame Data” file displaying the vehicle’s VIN **and** all accompanying DTCs.

For instructions on saving an “ALL DTC” list or “Freeze Frame Data” file and attaching to a Techline case, go to:

- MDL > service > systems > Techline > Techline system
- Click on the “HOW—TO” Instructions button, and follow instructions under “DTC LISTS” and “FREEZE FRAME DATA.”

NOTE: A “screen shot” will **NOT** be accepted as it does not include the vehicle’s VIN.



- b. Create a Techline case and attach the file(s) to the Techline case.
 - c. Contact Techline for assistance.
 - d. Order a replacement transmission assembly.
Refer to Parts Information in this TSB for the correct part number.
 - e. Replace the CVT-8 transaxle, flush the external cooler, and perform the CVT ECU coding procedures found in TSB-15-23-001, “F1CJC/W1CJC CVT ECU Coding Procedure.”
4. Look up the vehicle’s VIN in the Warranty Superscreen and verify that SR-16-006 has been completed.

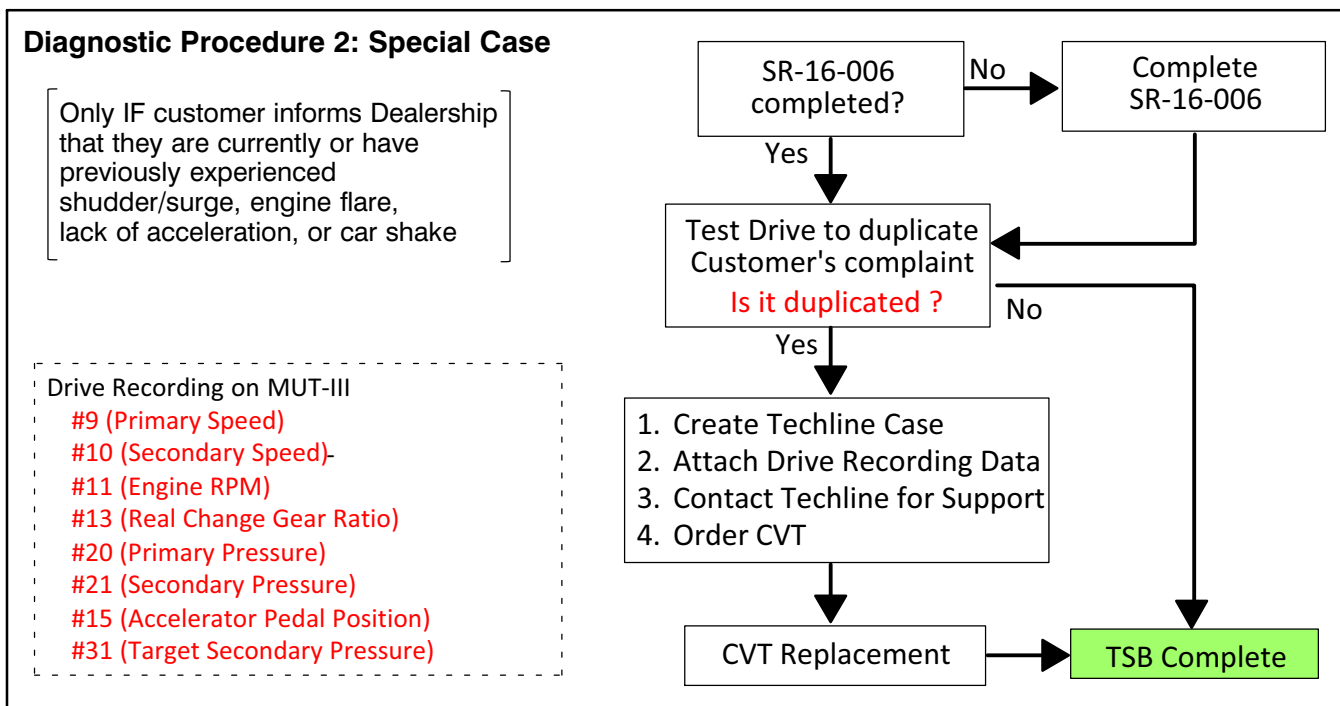
Has SR-16-006 been completed?

- **YES** – Repair is complete.
- **NO** – Complete SR-16-006.

NOTE: All CAN reprogramming is now performed with MUT3—SE. Refer to TIN-17-00-001REV for more details on the updated procedures with MUT3—SE.

DIAGNOSTIC PROCEDURE 2: SPECIAL CASE

ONLY if customer reports a shudder/surge condition, follow this procedure **before** replacing the CVT-8 transmission.



1. Look up the vehicle’s VIN in the Warranty Superscreen and verify that SR-16-006 has been completed. If not completed, perform SR-16-006, then go to step 2.
2. Test drive the vehicle to see if the shudder/surge condition can be duplicated.
 - a. Refer to “Figure 1: Test Drive Procedure for Duplicating CVT-8 Belt Slip” on next page.
 - b. Setup MUT-III with the applicable Drive Recording parameters listed in the “Diagnostic Procedure 2: Special Case” diagram above.



For instructions on setting up Drive Recordings in **MUTIII-SE**:

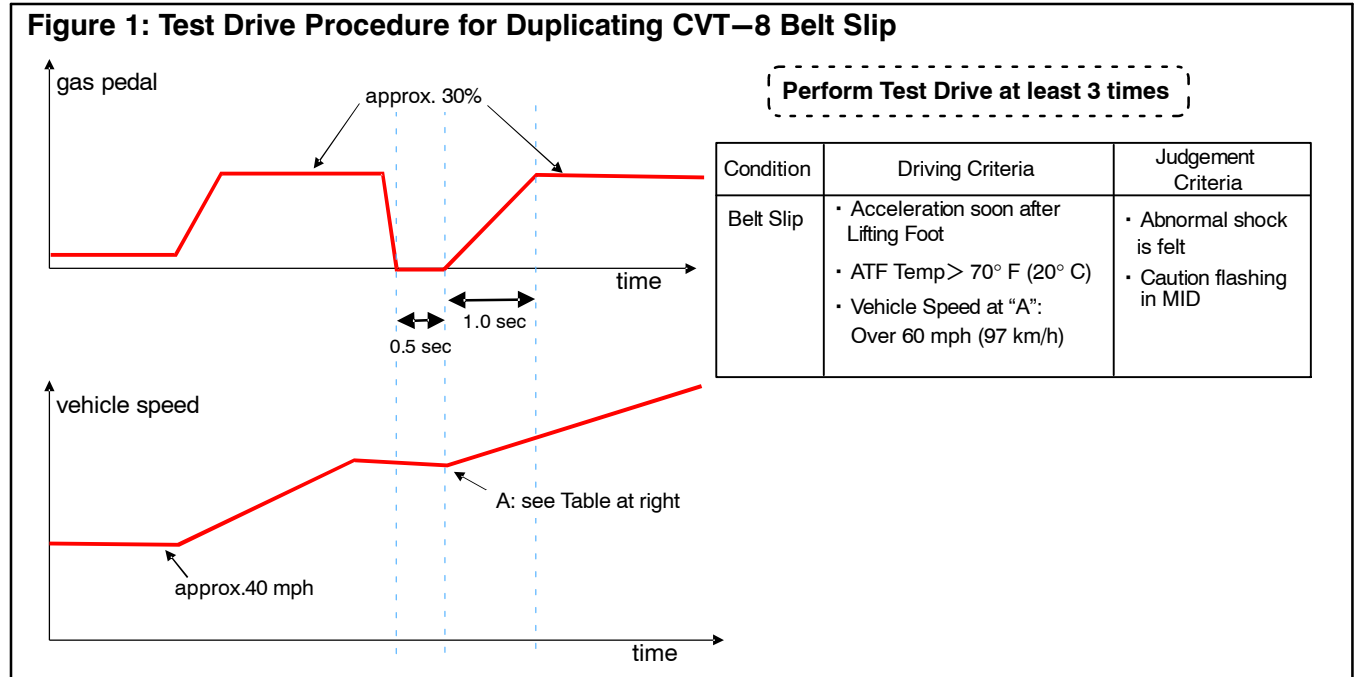
- Using MEDIC, from the main page, click the “MUT3-SE” icon at the top center of the screen to open MUT-III SE.
- Click on the MUTIII-SE User’s Manual button in lower left corner; go to Chapter 5: Drive Recorder.
- Set the Manual Trigger to index the recording when the shudder/surge condition is noticed.

- c. Follow the Test Drive procedures to duplicate these conditions. Set the Manual Trigger when the shudder/surge condition is noticed.



WARNING

Test drive route should be relatively free from other traffic so you can safely conduct the test and concentrate on vehicle operation and performance. ALWAYS follow all traffic laws and safe driving practices.

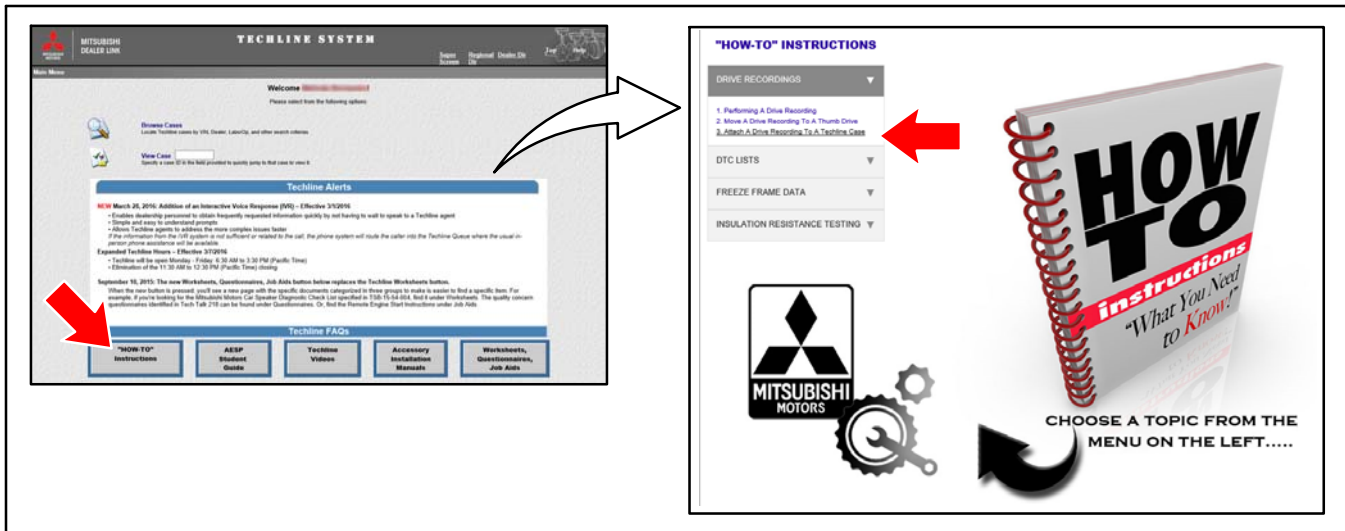


3. Was the shudder/surge condition duplicated?
 - **YES** – Go to step 4.
 - **NO** – Repair is complete. Return vehicle to customer.
4. Create a Techline case.
5. Attach the following Drive Recording Data from MUT-III to the Techline case.

<u>No.</u>	<u>Description</u>	<u>No.</u>	<u>Description</u>
9	Primary Speed	20	Primary Pressure
10	Secondary Speed	21	Secondary Pressure
11	Engine RPM	15	Accelerator Pedal Position
13	Real Change Gear Ratio	31	Target Secondary Pressure

For instructions on attaching a Drive Recording to a Techline case, go to:

- MDL > service > systems > Techline > Techline system
- Click on the "HOW-TO" Instructions button, and follow instructions under "DRIVE RECORDINGS" and "3. Attach A Drive Recording To A Techline Case."



6. Contact Techline for assistance.
7. Order a replacement transmission assembly.
Refer to Parts Information in this TSB for the correct part number.
8. Replace the CVT-8 transaxle, flush the external cooler, and perform the CVT ECU coding procedures found in TSB-15-23-001, "F1CJC/W1CJC CVT ECU Coding Procedure."

PARTS INFORMATION

Use the genuine Mitsubishi Parts listed below:

NOTE: ONLY order a new CVT-8 transmission after following instructions in the **Repair Procedure** in this TSB.

Description	Model	Part Number		Quantity
CVT-8 Transmission Assembly	2016 Lancer (4B11)	2WD	2700A401	1
		4WD	2700A403	1
	2016 Lancer (4B12)	2WD	2700A435	1
		4WD	2700A406	1
	2016 Outlander (4J12)	2WD	2700A435	1
		4WD	2700A406	1
	2015 Outlander Sport/RVR (4B11)	2WD	2700A401	1
		4WD	2700A403	1
Transmission Fluid: Mitsubishi Motors Genuine CVTF-J4	All	MZ320185		6.9 L (7.3 qt)

WARRANTY INFORMATION

REPROGRAMMING OF CVT-8 TRANSMISSION:

Look up the vehicle's VIN in the Warranty Superscreen. Check if any of the following campaigns are showing as open on the Superscreen:

- C1606Z
- C1512Z
- C1514R (Canada)
- C1607Z
- C1513R

If any of these campaigns are NOT completed, complete SR-16-006 ONLY, following instructions in that bulletin to enter the proper claims for the vehicle.

TEST DRIVE AND REPLACEMENT OF CVT-8 TRANSMISSION:

Operation	Nature Code	Cause Code	Country of Origin	Model	Labor Operation	Vehicle Drive	Time Allowance
Test Drive Only (no replacement needed)	05A	440	USA, Canada, Puerto Rico	All	233010TD	All	0.3 hrs
Replace CVT-8 Assembly + includes Test Drive	05A	440	USA	Lancer	233010R1	2WD	5.5 hrs
				Lancer AWC		4WD	6.4 hrs
			Canada	Lancer	233010R2	2WD	5.8 hrs
				Lancer AWC		4WD	6.7 hrs
			USA, Puerto Rico	Outlander	233010R3	2WD	6.5 hrs
					233010R4	4WD w/out S-AWC*	7.1 hrs
					233010R5	4WD w/S-AWC*	8.5 hrs
					233010R6	2WD	7.0 hrs
			Canada	Outlander	233010R7	4WD w/out S-AWC*	7.6 hrs
					233010R8	4WD w/S-AWC*	9.0 hrs
			USA, Puerto Rico	Outlander Sport	233010R9	2WD	6.5 hrs
					233010R0	4WD	7.6 hrs
			Canada	RVR	233010R9	2WD	6.8 hrs
					233010R0	4WD	7.9 hrs

Warranty Coverage: Powertrain coverage

- 10/100 if Original owner
- 5/60 if Subsequent owner

* Please check the "Monroney" listing to verify if a 4WD/AWD vehicle has Super All Wheel Control (S-AWC). The "Monroney" can be found on the Warranty Superscreen for the specific VIN.

Factory and POE Installed Equipment
10B GD1 GL1 GM1 G21 G81 HC1
View Vehicle Monroney 
Dealer Installed Options